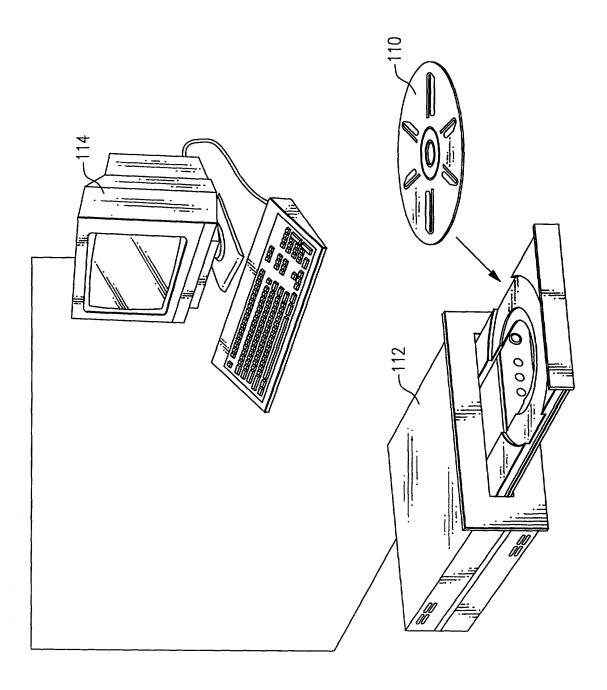
TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 $\frac{1}{45}$

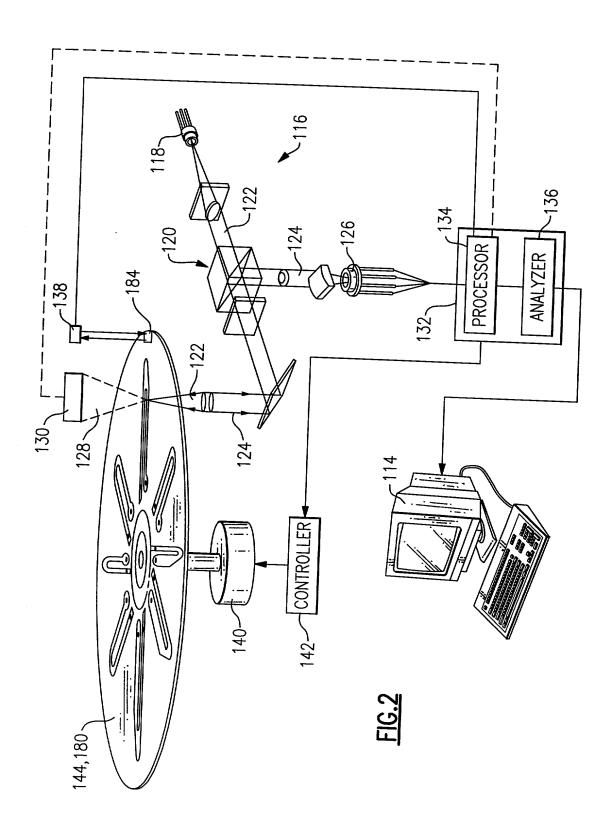


I certify that this document was submitted to the U.S. Patent and Trademark Office using U.S. Express Mail # <u>EL923484765US</u>

Jacquelyn Campbell

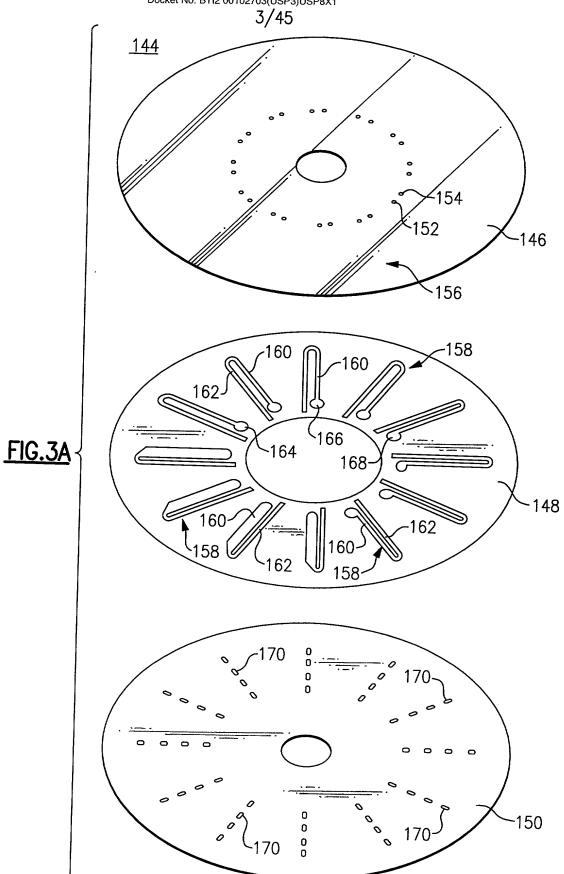
Print Name £ February 28, 2002 Date

TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS RELATED OPTICAL BIODICCE Inventors: Phan, et al.
Docket No: BTI2 00102703(USP3)USP8X1



TITLE. METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1



TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS RELATED OPTICAL BIODISCO.
Inventors: Phan, et al.
Docket No: BTI2 00102703(USP3)USP8X1
4/45

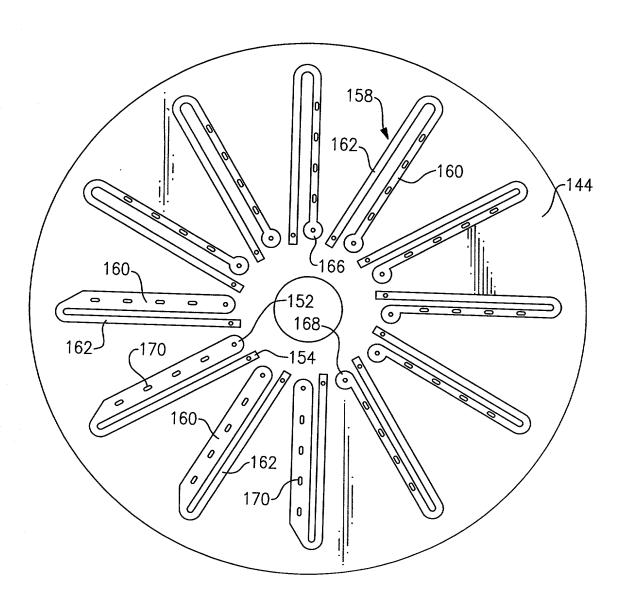
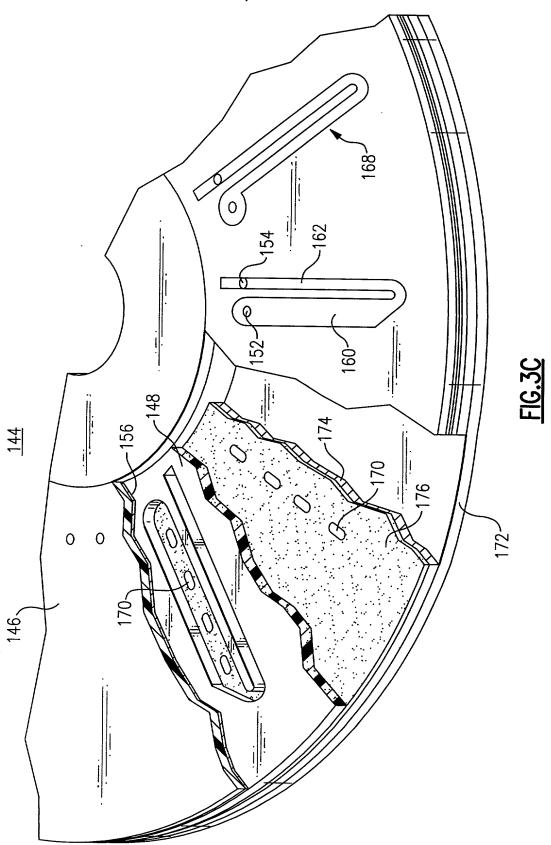


FIG.3B

TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 $\frac{5/45}{}$

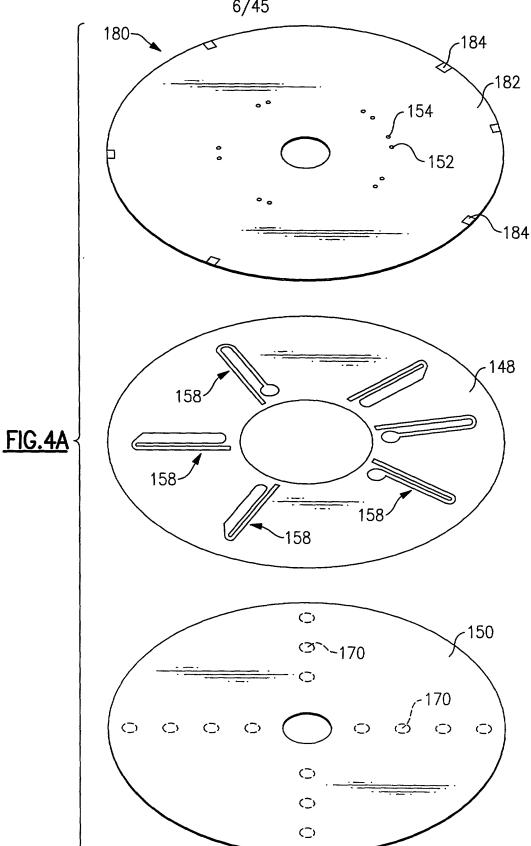




TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1

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TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1

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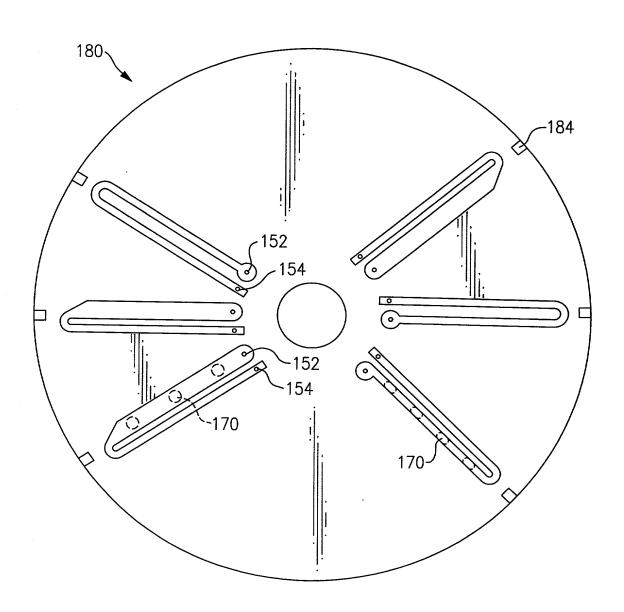
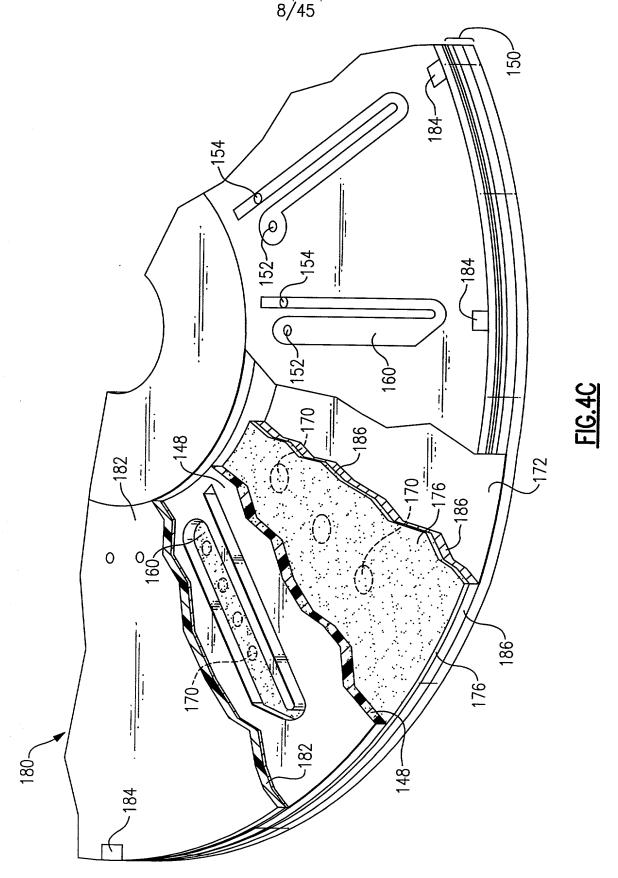


FIG.4B

TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 $\frac{8}{45}$

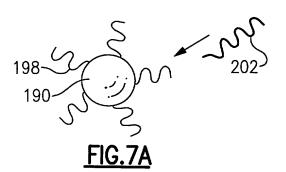


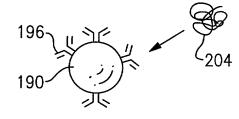
TITLE. METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1

9/45 750 186 186 82 DETECTOR DETECTOR **PHOTO** PHOT0 124. 160 188 FIG.5B 7150 150 188

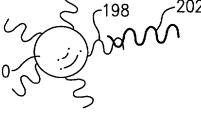
TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.
Docket No: BTI2 00102703(USP3)USP8X1





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FIG.7B



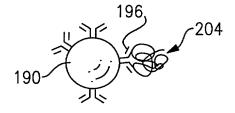
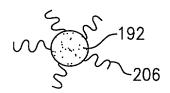


FIG.8A

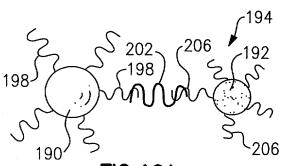
FIG.8B



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FIG.9A

FIG.9B



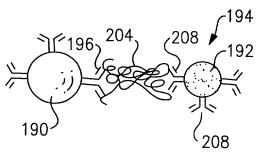
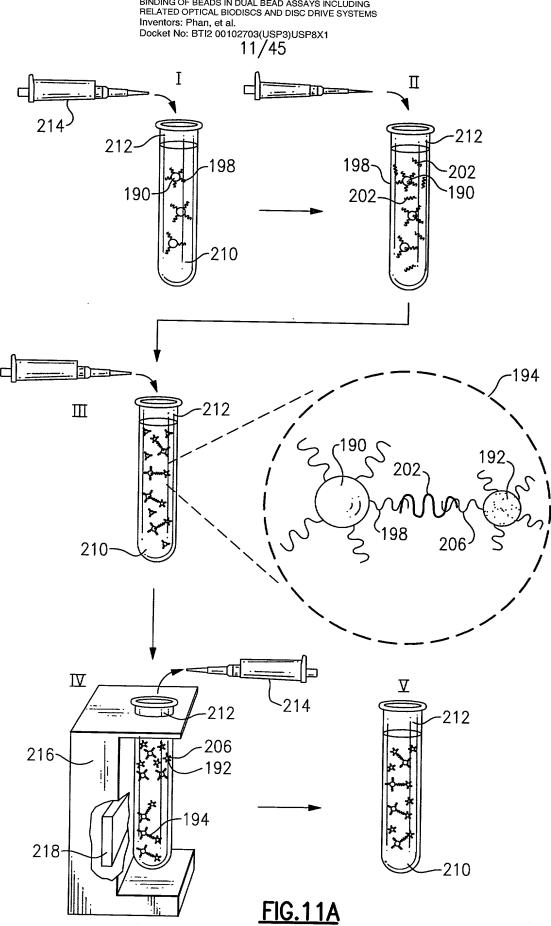


FIG. 10A

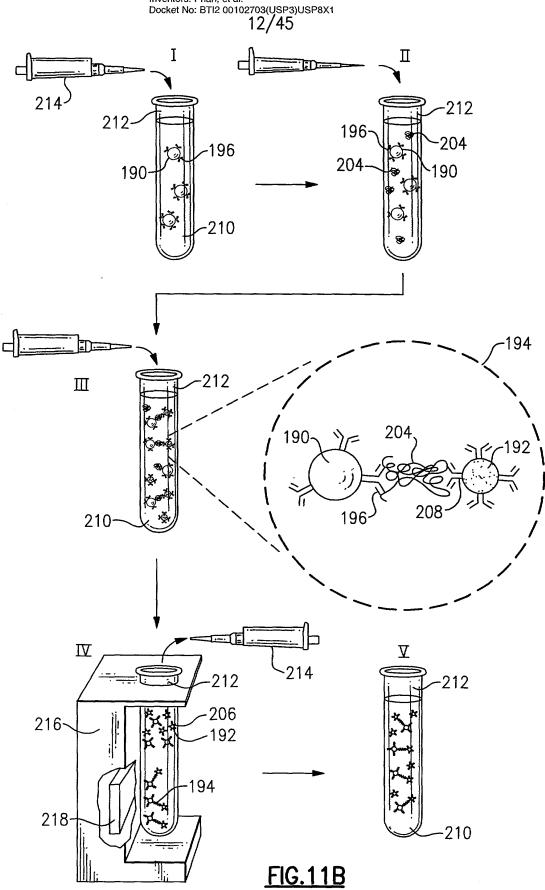
FIG.10B

TITLE METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS



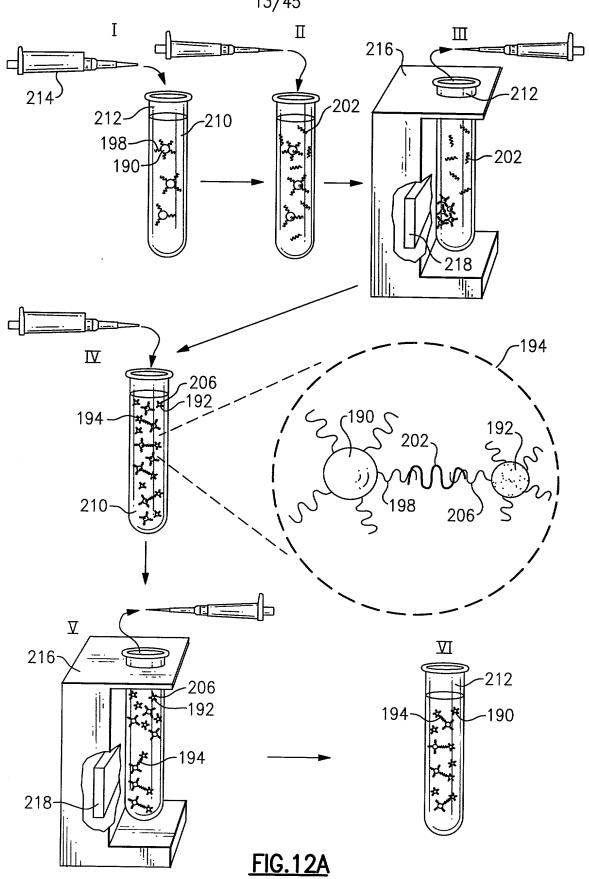
TITLE. METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS

Inventors: Phan, et al.

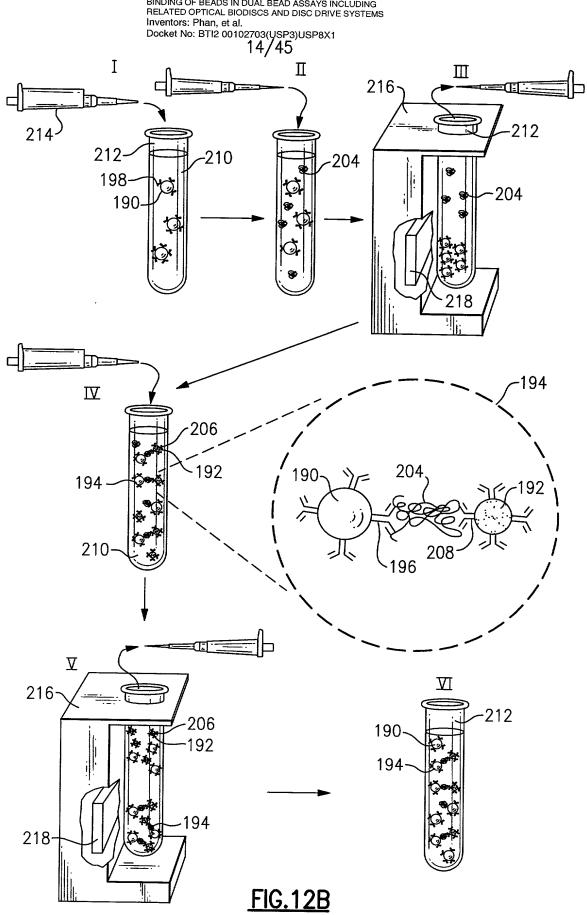


TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1

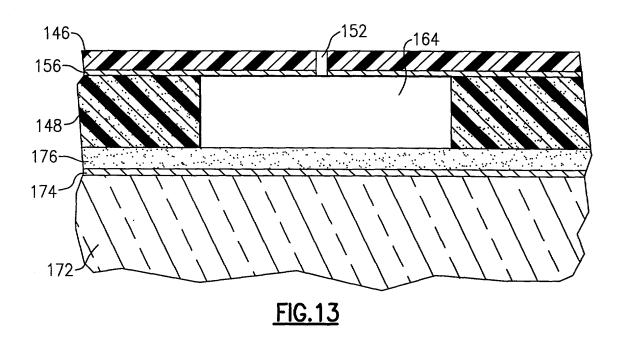


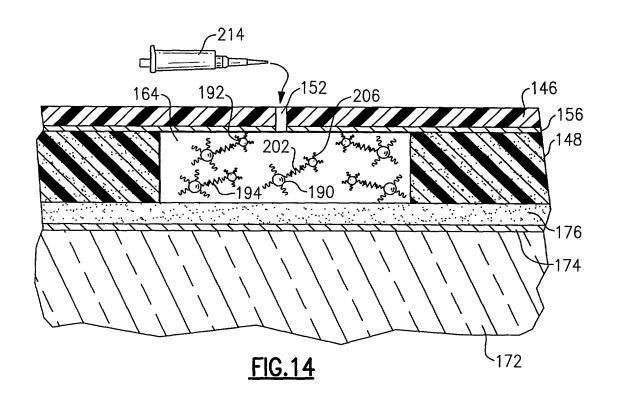
TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS



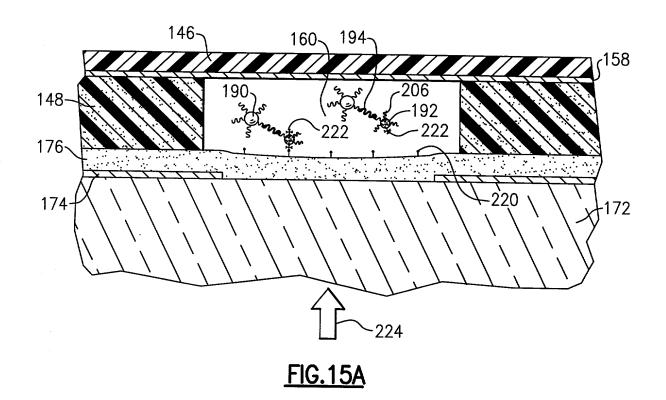
TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

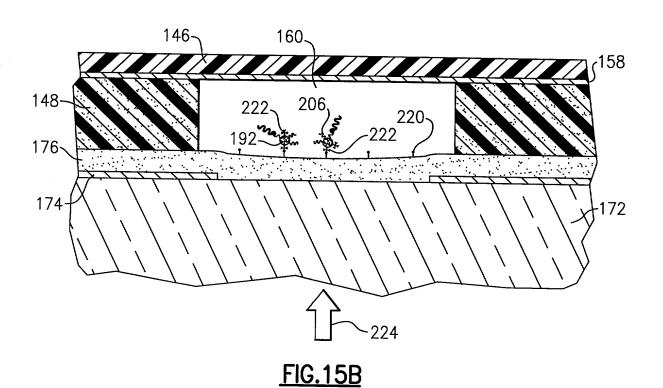
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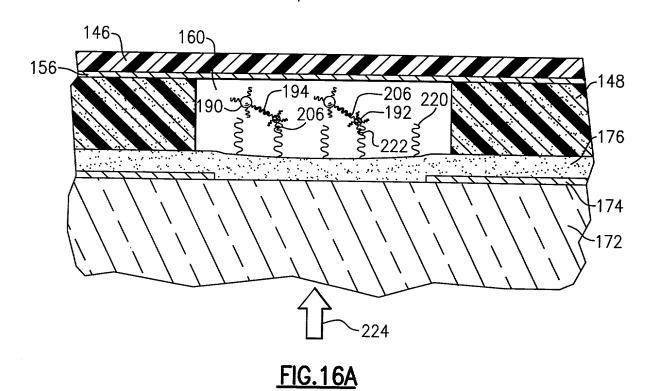
TITLE METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 $\frac{16/45}{45}$

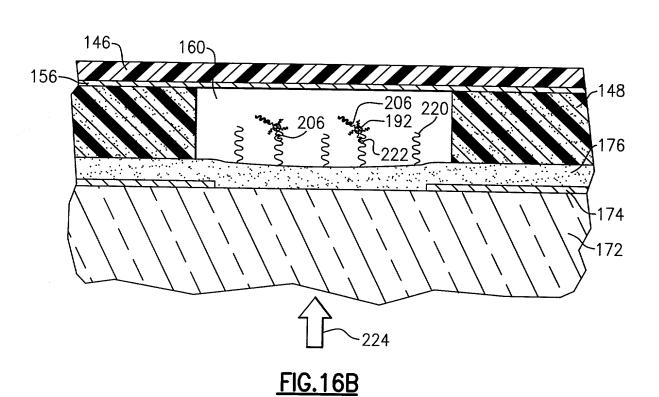




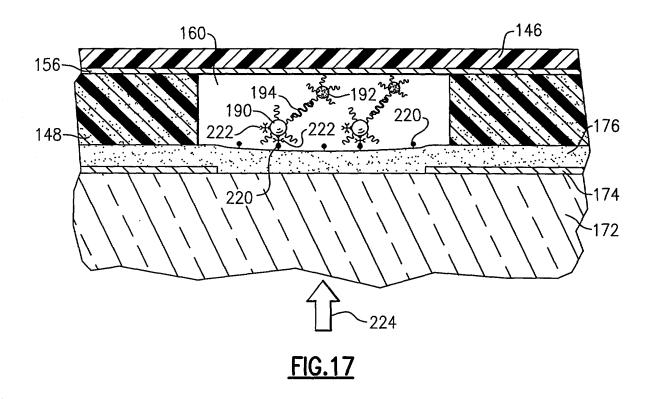
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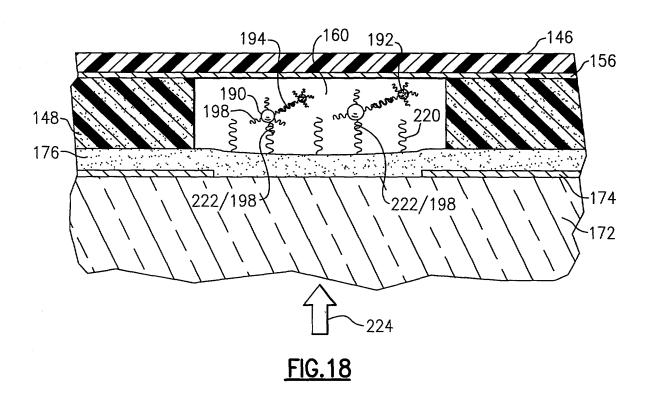
Docket No: BTI2 00102703(USP3)USP8X1 17/45



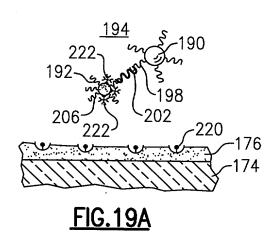


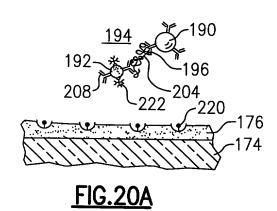
TITLE. METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 18/45

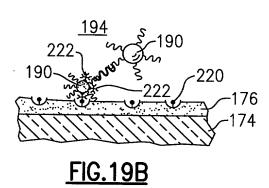


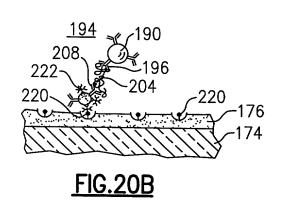


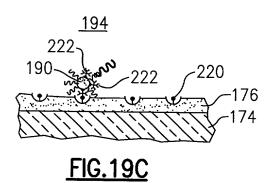
TITLE METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 $\frac{19/45}$

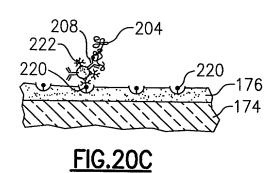




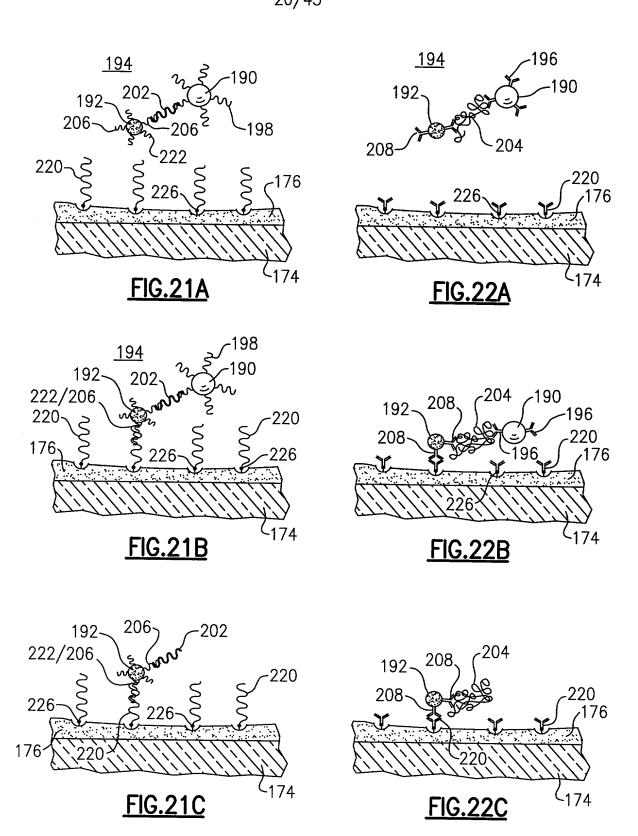




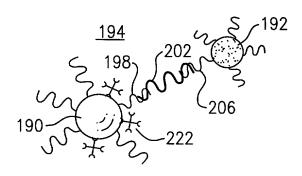




TITLE. METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 20/45



TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 21/45



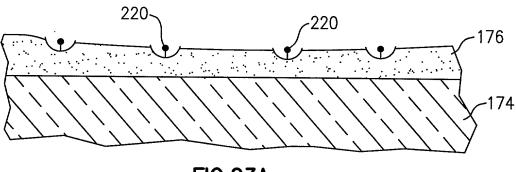


FIG.23A

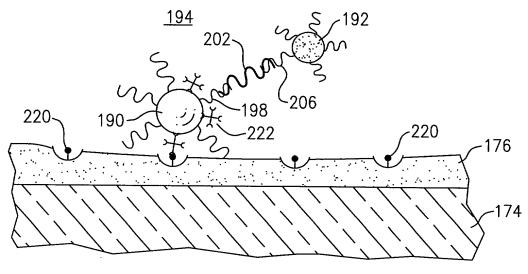


FIG.23B

TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS RELATED OPTICAL BIODICO Inventors: Phan, et al.
Docket No: BTI2 00102703(USP3)USP8X1

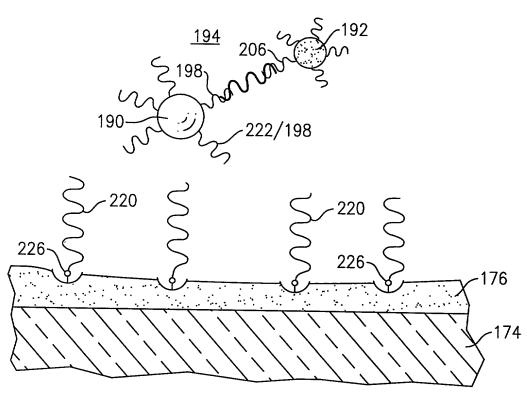


FIG.24A

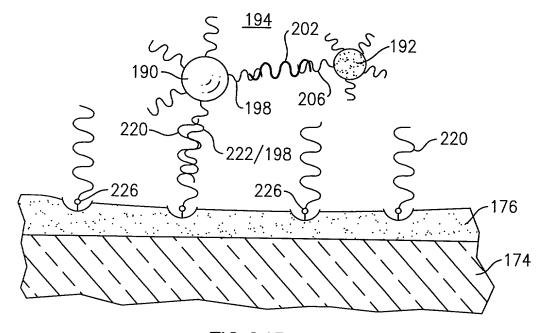
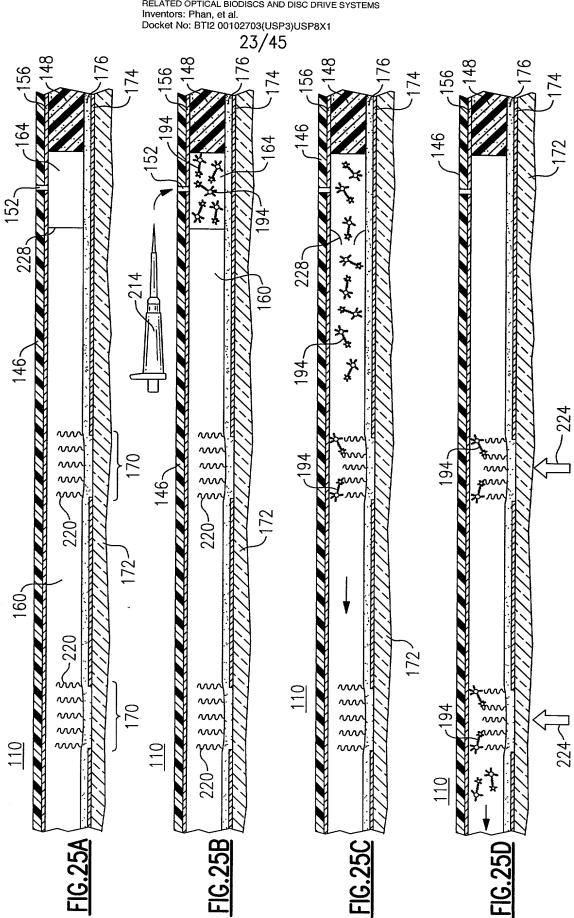
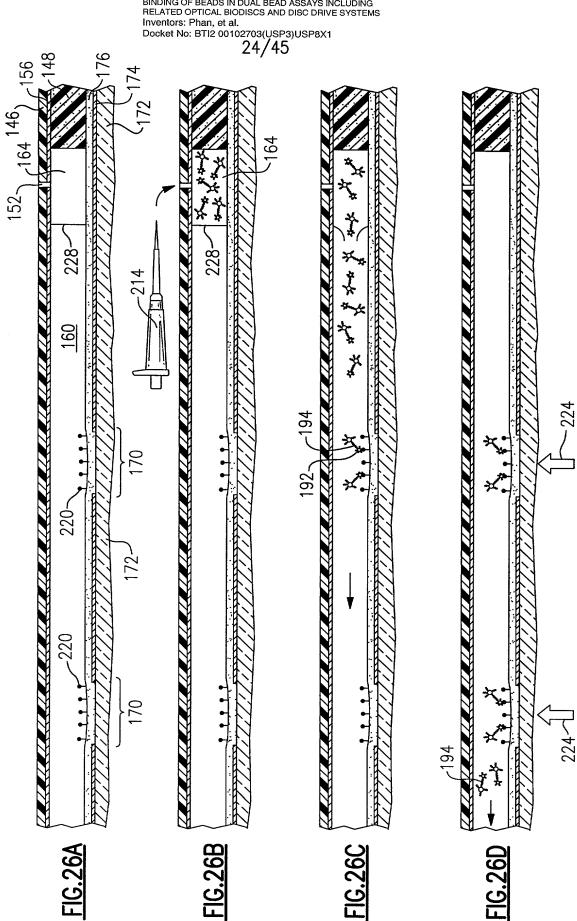


FIG.24B

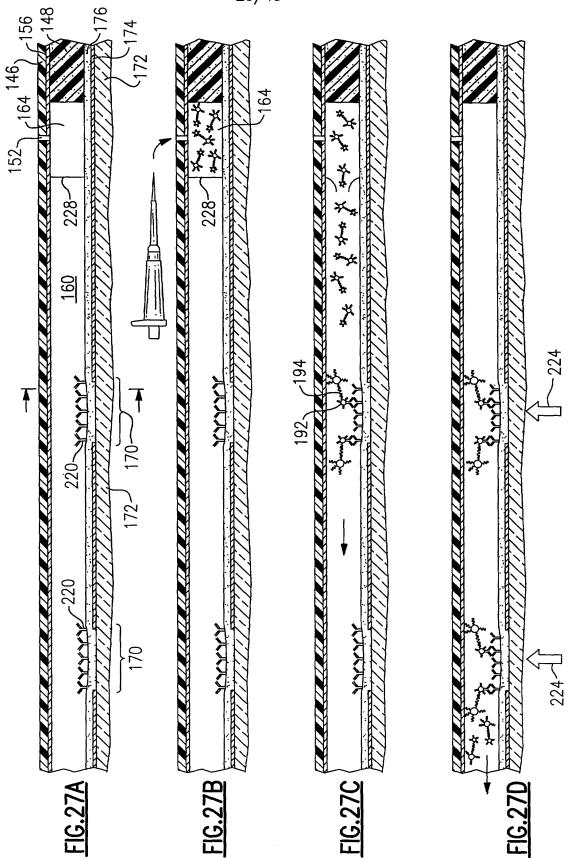
TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS



TITLE METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS



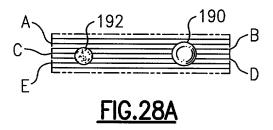
TITLE. METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 25/45



TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1

26/45



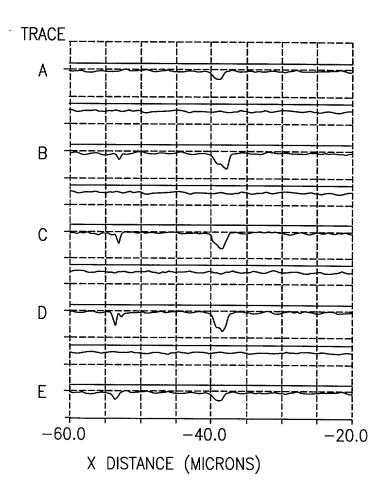
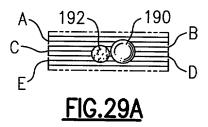


FIG.28B

TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 27/45



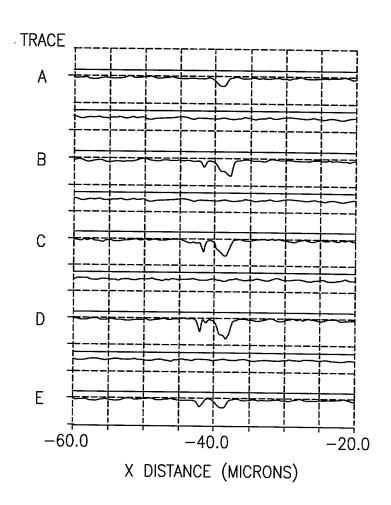
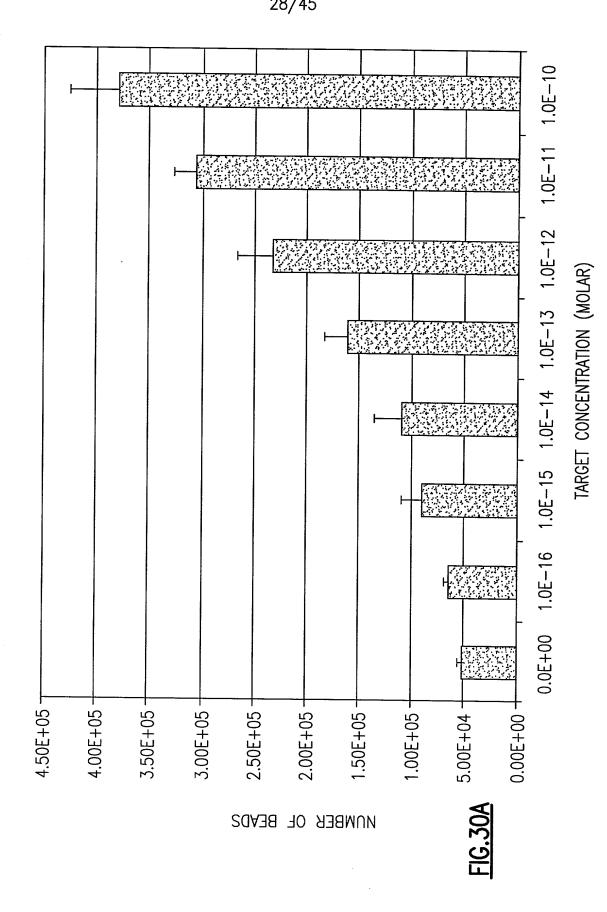


FIG.29B

TITLE METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 28/45



TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS

Inventors: Phan, et al.
Docket No: BTI2 00102703(USP3)USP8X1

29/45

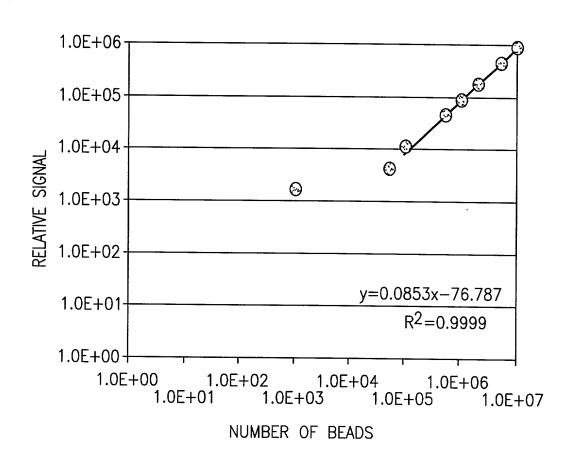


FIG.30B

TITLE METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 $\frac{30/45}{}$

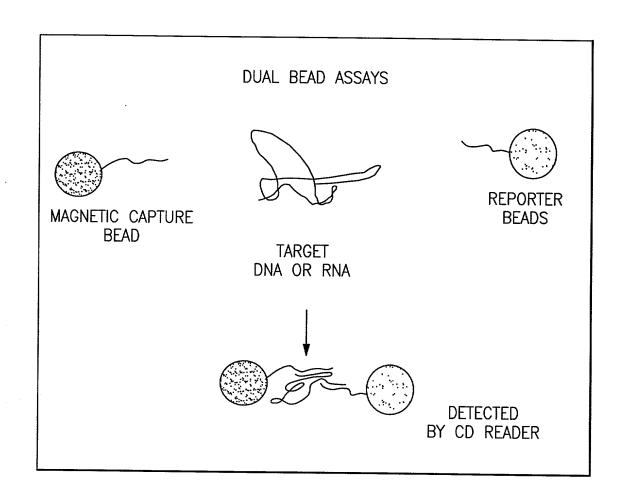
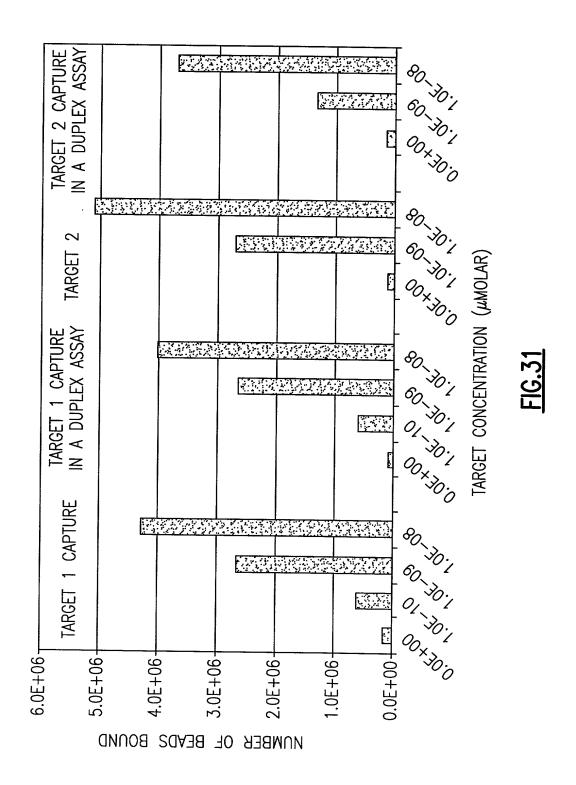


FIG.30C

TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1

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TITLE METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 $\frac{32/45}{45}$

DUAL BEAD ASSAY MULTIPLEXING

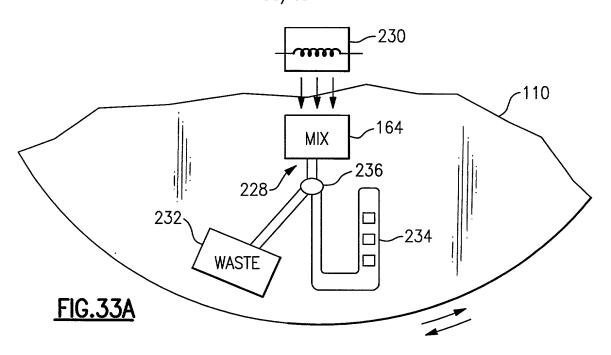
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M	0 0 0	® ○ ® ◎ →
M		
M		M M

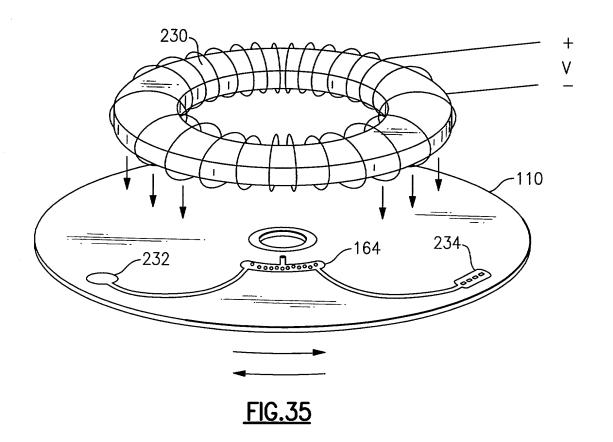
FIG.32

TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

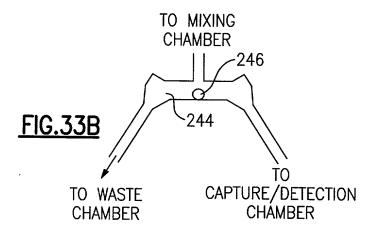
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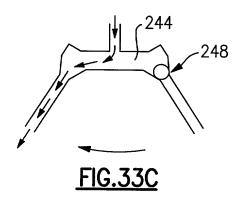
33/45

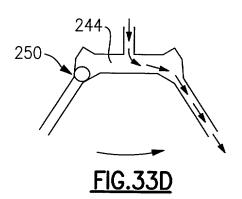




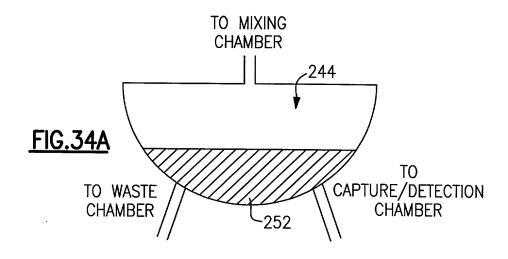
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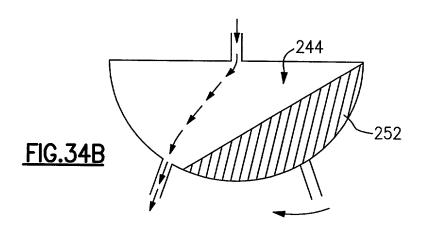


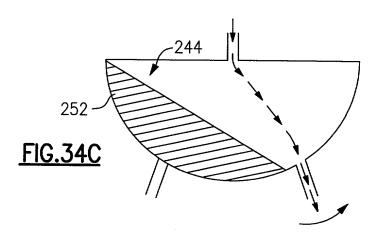




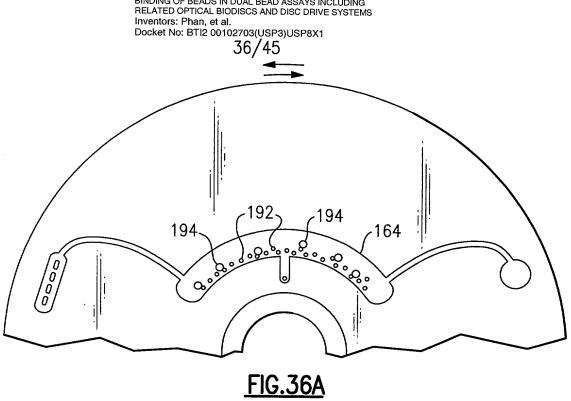
TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 $\frac{35/45}{45}$

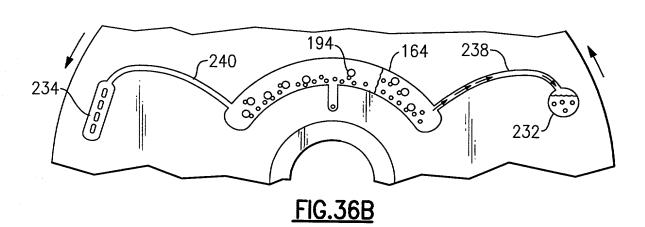


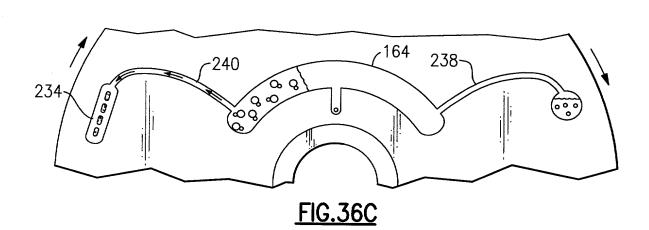




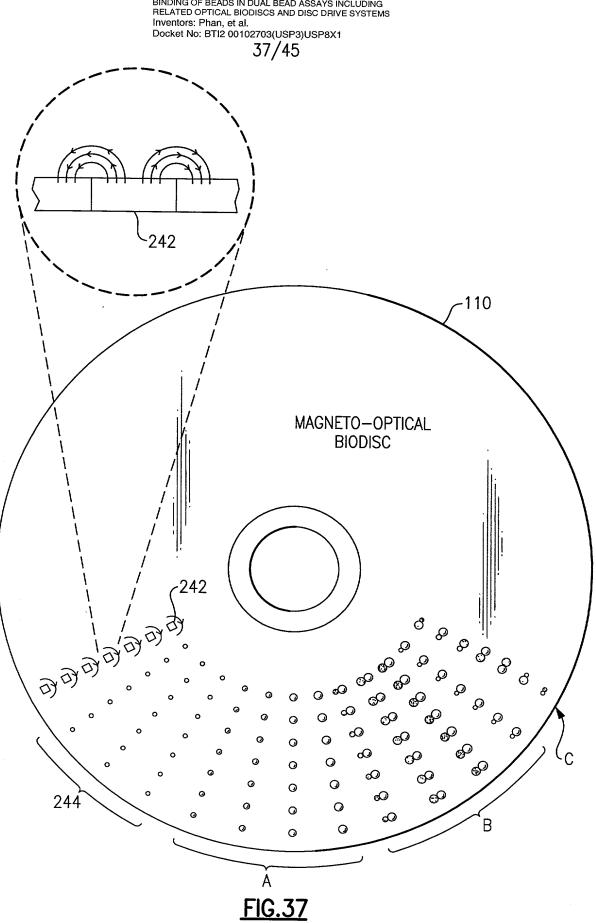
TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS





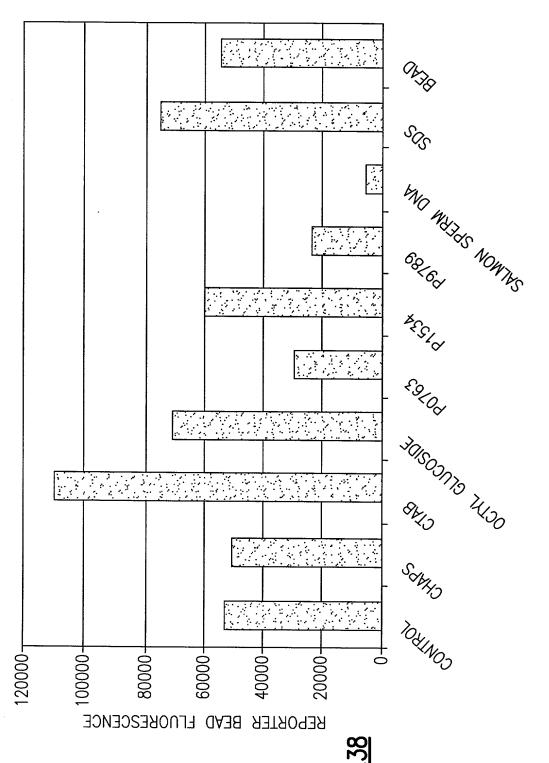


TITLE METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS

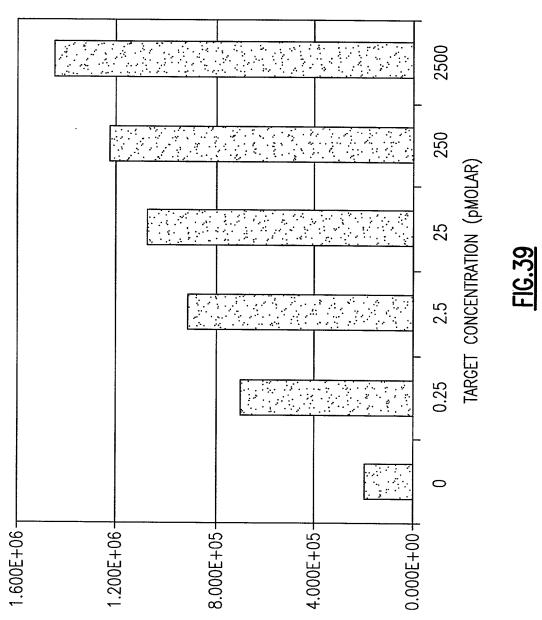


TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1

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BEAD PRETREATMENT TYPE



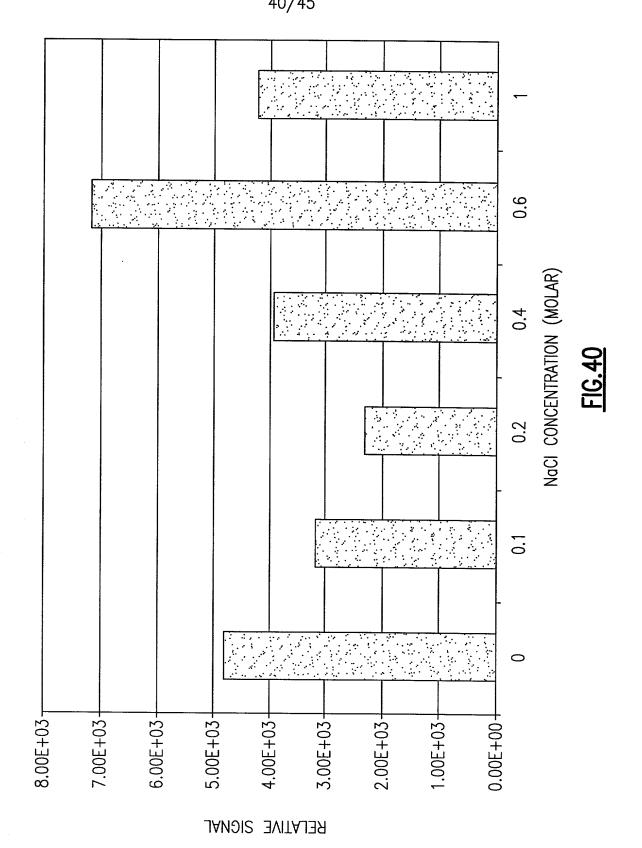
TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS

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Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1

NUMBER OF BEADS BOUND

TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 $\frac{40/45}$



TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 $\frac{41/45}{}$

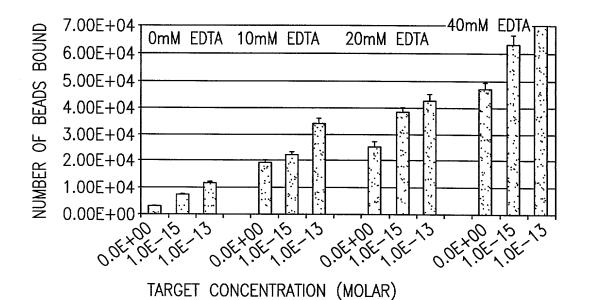
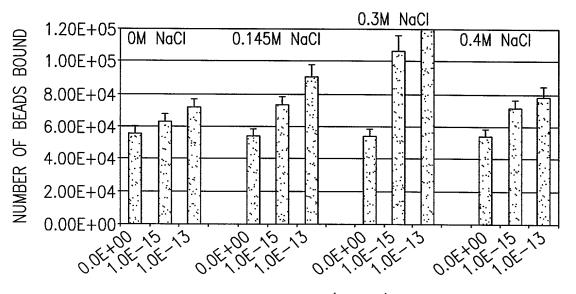


FIG.41



TARGET CONCENTRATION (MOLAR)

FIG.42

TITLE METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

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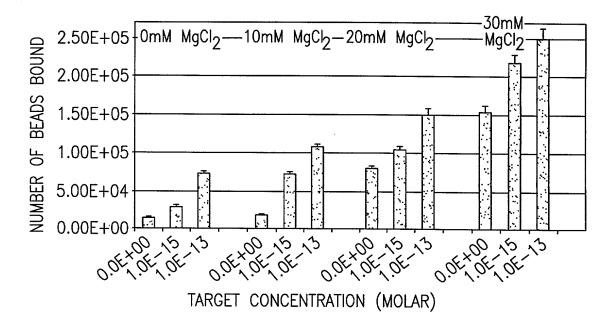
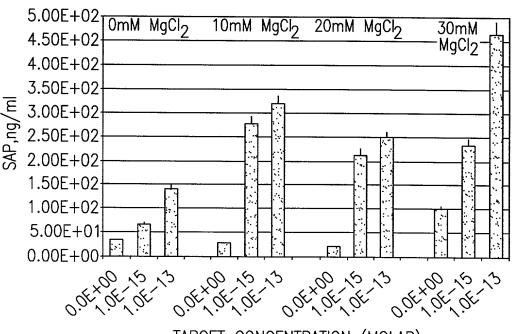


FIG.43A



TARGET CONCENTRATION (MOLAR)

FIG.43B

TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 $\frac{43}{45}$

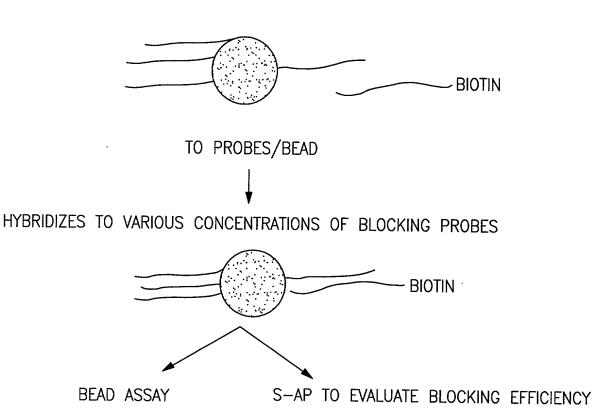
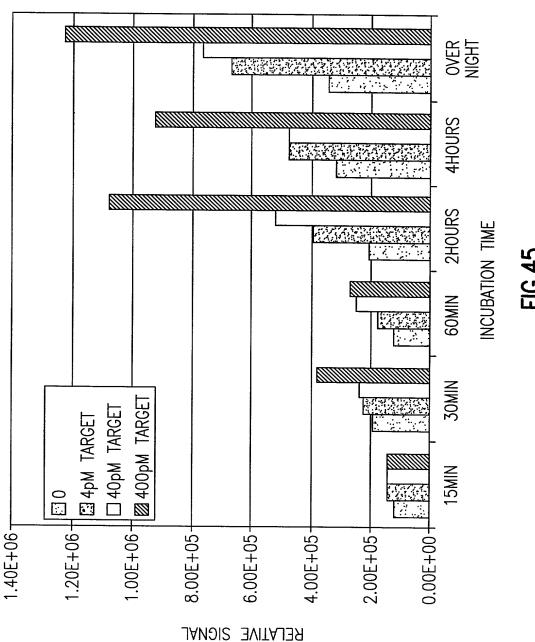
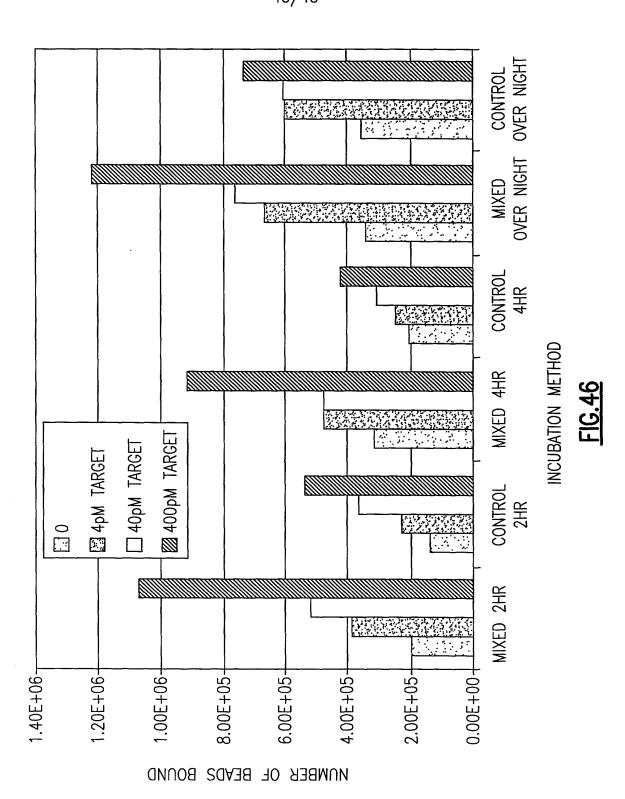


FIG.44

TITLE. METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1

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Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 $45 \Big/ 45$

TITLE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS INVENTEES. Phan at al.